Title (en)

PROTON BEAM TREATMENT SYSTEM

Title (de

PROTONENSTRAHL-THERAPIESYSTEM

Title (fr)

SYSTÈME DE THÉRAPIE PAR UN FAISCEAU DE PROTONS

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Application

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Abstract (en)

[origin: WO2009106603A1] The invention relates to a particle beam treatment system (2) comprising a beam generating unit (4) for generating and adjusting the kinetic energy of a beam of charged particles, comprising at least two beam guide units (10a, 10b, 10c, 10d) for feeding the beam of charged particles to a treatment location (26a, 26b) associated with the respective beam guide unit (10a, 10b, 10c, 10d), wherein each beam guide unit (10a, 10b, 10c, 10d) comprises at least one beam deflection unit (14a, 14b) and/or at least one beam forming unit (16a, 16b). The object of the invention is to provide a particle beam treatment system with which to reduce the technical effort in using the device, and thereby reduce the costs associated therewith. The object is achieved in that the at least two beam guide units (10a, 10b, 10c, 10d) are designed for different areas of the kinetic energy of the charged particles such that the at least one beam deflection unit (14a, 14b) and/or the at least one beam forming unit (16a, 16b) of each beam guide unit (10a, 10b, 10c, 10d) are tailored to the energy of the particles and/or to beam characteristics of the particle beam. The invention further relates to a particle beam treatment method and use of the particle beam treatment system (2).

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